



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCIO
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

MB Bark, LLC)	Departmental
Androscoggin County)	Findings of Fact and Order
Poland, Maine)	Air Emission License
A-831-71-D-A (SM))	Amendment #1

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

MB Bark, LLC (MBB) of Poland, Maine was issued Air Emission License A-831-71-C-R/A on July 11, 2008, permitting the operation of emission sources associated with their bark mulch drying facility.

MBB has requested a modification to their License in order to add Pionite Dust as an addition fuel in the Burner.

B. Emission Equipment

MBB is authorized to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type</u>	<u>Stack #</u>
Burner	30.0	3700 lb/hr (10% moisture) 3717 lb/hr	Dried mulch fines (biomass), Pionite Dust	1

C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. This modification is determined to be a minor modification and has been processed as such.

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 24, 2005). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Burner and Rotary Drum Dryer

MBB dries 40% moisture mulch to 10% moisture mulch. A 30.0 MMBtu/hr burner currently combusts dried mulch fines to provide heat to the dryer. The Pionite Dust is composed of cellulose fiber bonded into a phenolic resin. Analysis has shown that the Pionite Dust combusts with the same characteristics of dried mulch fuel. Fuel analysis shows a higher sulfur content and a phenol component to the Pionite Dust that differentiates it from mulch. As phenol is a Hazardous Air Pollutant (HAP), MBB has agreed to limit the firing of Pionite Dust to 6000 tons on a 12 month rolling total in order to remain a minor source of HAP emissions. Analysis of other HAPs revealed a profile similar to wood.

BPT for the Burner and Rotary Drum Dryer (Stack 1) is the following:

1. The following emission limits for PM, NO_x, CO and VOC were established for the Burner in the BACT analysis outlined in Air Emission License A-831-71-A-N. These limits now represent BPT for the firing of mulch and Pionite Dust.

PM	-	8.76 lb/hr
NO _x	-	6.6 lb/hr
CO	-	18.0 lb/hr
VOC	-	0.51 lb/hr
2. SO₂ emission limits of 0.76 lb/hr (A-831-71-A-N) when firing mulch, and 0.321 lb/MMBtu (Mass Balance) when firing Pionite Dust shall be considered BPT and BACT respectively.
3. A BPT emission limit for the Dryer of 1.4 lb VOC per Bone Dry Ton (BDT) of wood processed is based on test data from units of similar size and age.

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4. Visible emissions from the stack serving the Burner and Rotary Drum Dryer (Stack #1) shall not exceed 20% opacity on a six (6) minute block average basis except for no more than two (2), six (6) minute block averages in a 3 hour period.
5. The use of a settling chamber and a high efficiency cyclone for particulate control shall be considered BPT.
6. MBB shall be limited to processing 75,000 tons of product output at 10% moisture, on a 12 month rolling total. Records documenting production shall be kept for compliance purposes.

C. Facility HAPs and Fuel Restrictions

1. MBB shall not exceed 9.9 tons of any single HAP, or 24.9 tons of total HAPs on a 12 month rolling total.
2. MBB shall be limited to firing 6000 tons of Pionite Dust on a 12 month rolling total.

D. Annual Emissions

1. Burner emissions for PM, NO_x, CO, and VOC are based on continuous operation, firing mulch fuel at 10% moisture.
2. SO₂ emissions from the Burner are based on the worst case scenario of firing 6000 tons of Pionite Dust and the remainder of the continuous operation firing mulch.
3. Dryer emissions are based on the processing of 75,000 tons of product output at 10% moisture.
4. MBB shall be limited to the following emissions based on a 12 month rolling total:

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC	Single HAP	Total HAP
Burner	38.4	38.4	17.6	28.9	78.8	2.2	-	-
Dryer	-	-	-	-	-	47.3	-	-
Total TPY	38.4	38.4	17.6	28.9	78.8	49.5	9.9	24.9

III.AMBIENT AIR QUALITY ANALYSIS

MBB submitted an ambient air quality analysis in Air Emission License A-831-71-A-N, demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. Since the Department still finds this analysis to be valid, an additional ambient air quality analysis is not required for this amendment.

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ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-831-71-D-A, subject to the Conditions found in Air Emission License A-831-71-C-R/A, and in the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

SPECIFIC CONDITIONS

The following shall replace condition 16(D) in License A-831-71-C-R/A

(16) Burner and Rotary Drum Dryer

D. Emissions from the stack serving the Burner and Rotary Drum Dryer (Stack #1) shall not exceed the following: [06-096 CMR 115, 06-096 CMR 103, A-831-71-A-N, BPT, BACT]

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Burner lb/MMBtu	0.29	-	-	-	-	-
Dryer lb/BDT	-	-	-	-	-	1.4
Burner lb/hr (firing mulch)	8.76	8.76	0.75	6.60	18.00	0.51
Dryer lb/hr	-	-	-	-	-	20.00
Total lb/hr from Stack #1 (firing mulch)	8.76	8.76	0.75	6.60	18.00	20.51
Burner lb/hr (firing Pionite Dust)	8.76	8.76	9.64	6.60	18.00	0.51
Dryer lb/hr	-	-	-	-	-	20.00
Total lb/hr from Stack #1 (firing Pionite Dust)	8.76	8.76	9.64	6.60	18.00	20.51

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The following are new conditions:

- (1) **Facility HAP Emissions and Fuel Restrictions** [06-096 CMR 115, BACT]
 - A. MBB shall not exceed 9.9 tons of any single HAP, or 24.9 tons of total HAPs on a 12 month rolling total.
 - B. MBB shall be limited to firing 6000 tons of Pionite Dust on a 12 month rolling total. Records from the supplier documenting quantity delivered shall be kept for compliance purposes.
- (2) **Air Toxics Emission Statement**

If MBB exceeds the thresholds for HAPs listed in Appendix A of 06-096 CMR 137 in an inventory year, in accordance with 06-096 CMR 137 the licensee shall report, every three years (2008, 2011, etc.) or as otherwise stated in 06-096 CMR 137, the information necessary to accurately update the State's toxic air pollutants emission inventory in a format prescribed by the Department containing the information required in 06-096 CMR 137.

Reports and questions should be directed to:

Attn: HAP Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017 Phone: (207) 287-2437

[06-096 CMR 137]

DONE AND DATED IN AUGUSTA, MAINE THIS 26th DAY OF March 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks Jr.
DAVID P. LITTELL, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-831-71-C-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/25/2008

Date of application acceptance: 10/16/2008

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan Voisine, Bureau of Air Quality.

